

## WHAT IS CLAIMED IS:

1. A video display deflection apparatus, comprising:

a cathode ray tube having a display screen with a shorter first axis and a longer second axis perpendicular to said first axis;

5 a first deflection field generator for producing a first deflection field in a beam path of an electron beam of said cathode ray tube at a first deflection frequency to vary a position of said electron beam, alternately, in a direction of said first axis and in a direction that is opposite to said first axis to provide for bi-directional scanning; and

10 a second deflection field generator for producing a second deflection field in said beam path at a second deflection frequency lower than said first deflection frequency to vary a position of said electron beam, alternately, in a direction of said second axis and in a direction that is opposite to said second axis.

2. The video display deflection apparatus according to Claim 1 wherein, in normal viewing, said first axis is disposed in a vertical direction with respect to a viewer.

15 3. A video display deflection apparatus according to Claim 1 wherein at least one of said first and second deflection field generators comprises a deflection winding that produces a magnetic deflection field.

4. A video display deflection apparatus according to Claim 1 wherein said first deflection field varies in a sinusoidal manner.

20 5. A video display deflection apparatus according to Claim 4 wherein said second deflection field includes a portion that varies in a flyback manner.

6. A video display deflection apparatus according to Claim 1 wherein said display screen has one of an aspect ratio of 4 by 3 and an aspect ratio of 16 by 9.